

● FIG. 1a

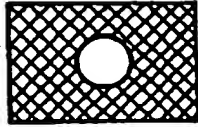


FIG. 1b



FIG. 1c

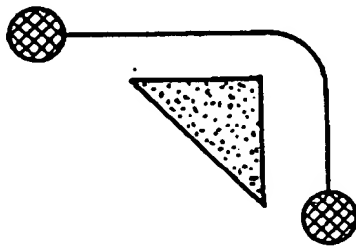


FIG. 1d



FIG. 1e

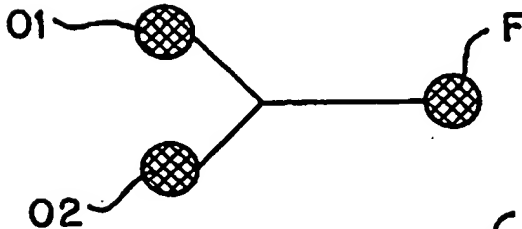


FIG. 1f

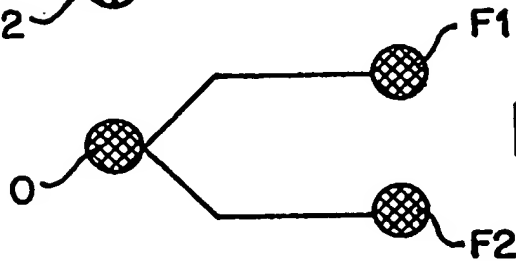


FIG. 1g

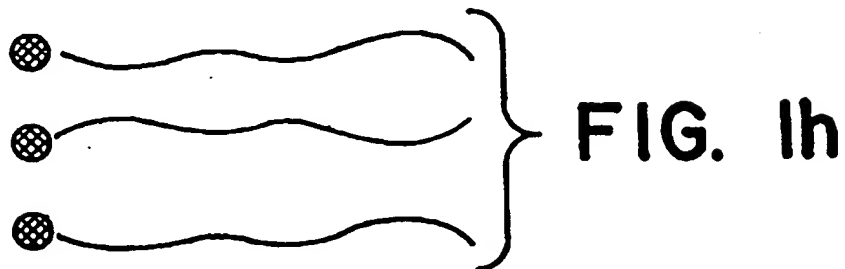


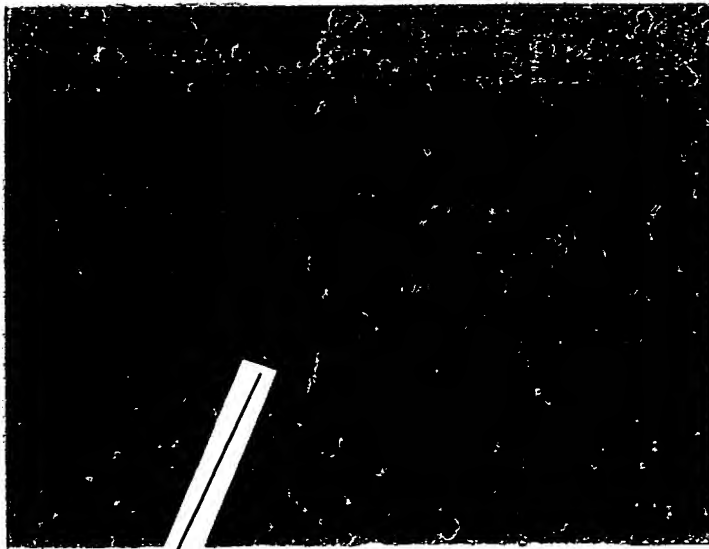
FIG. 1h

FIG. 1a

FIG. 2A



FIG. 2B



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FIG. 2C

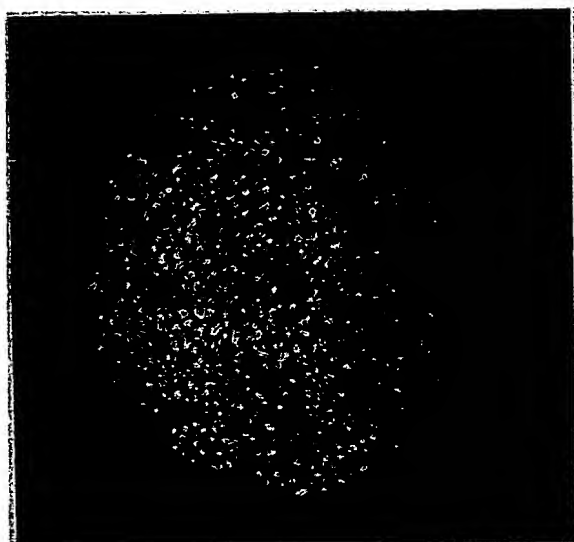


FIG. 2D

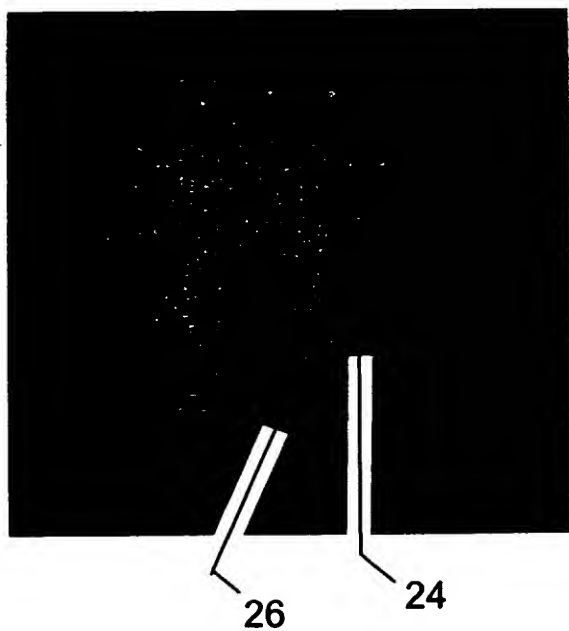


FIG. 3a

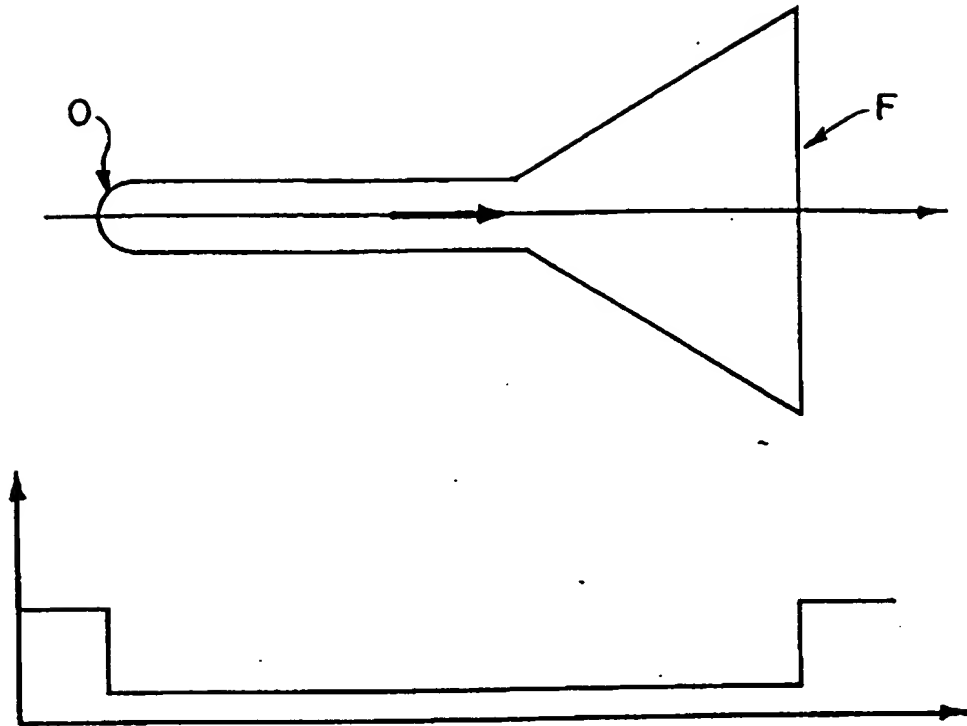


FIG. 3b

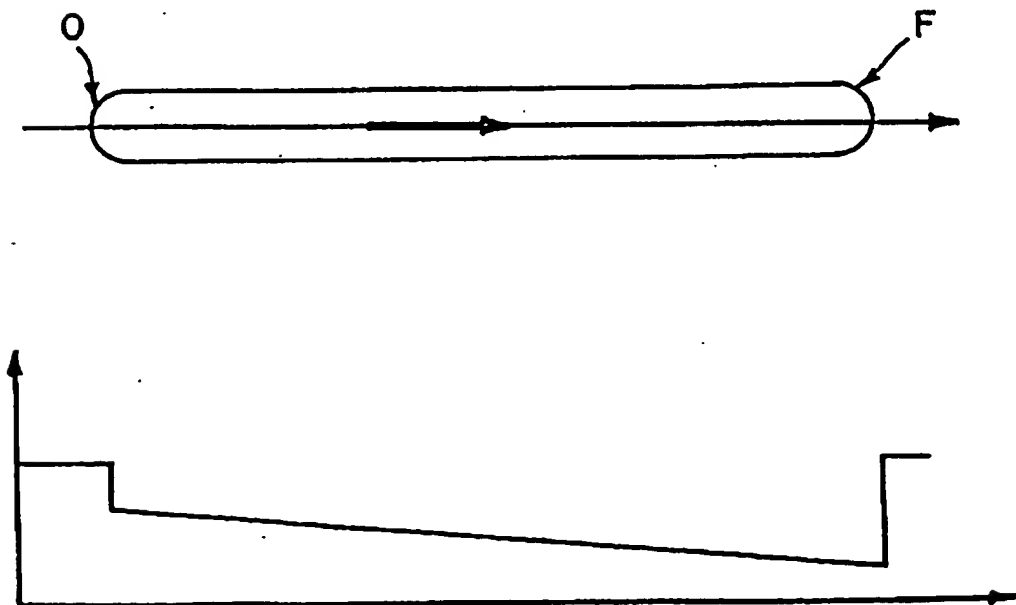


FIG. 3C



FIG. 3D



FIG. 4A

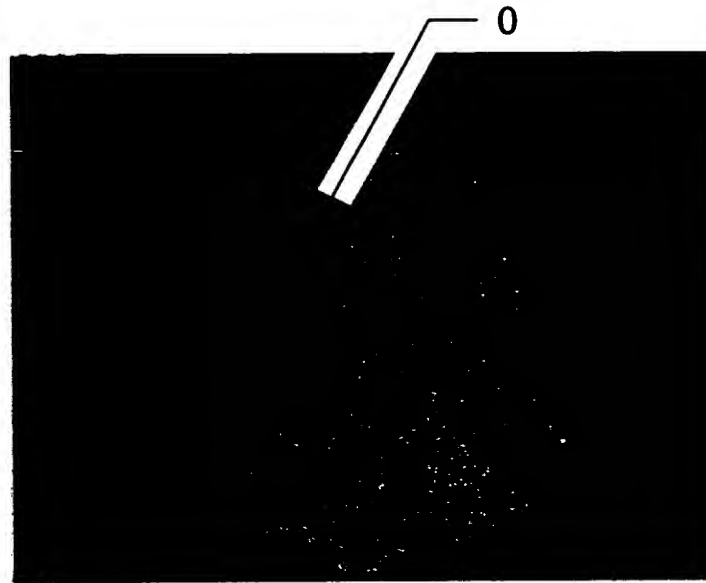


FIG. 4B

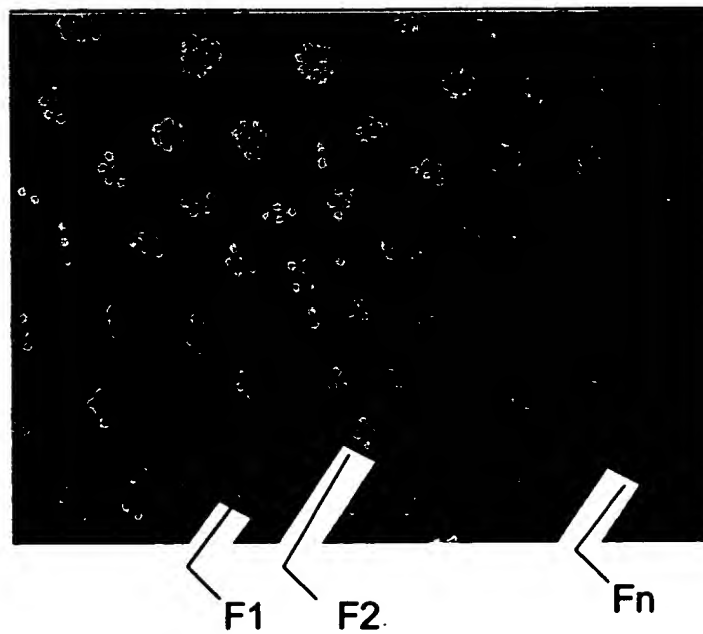


FIG. 5

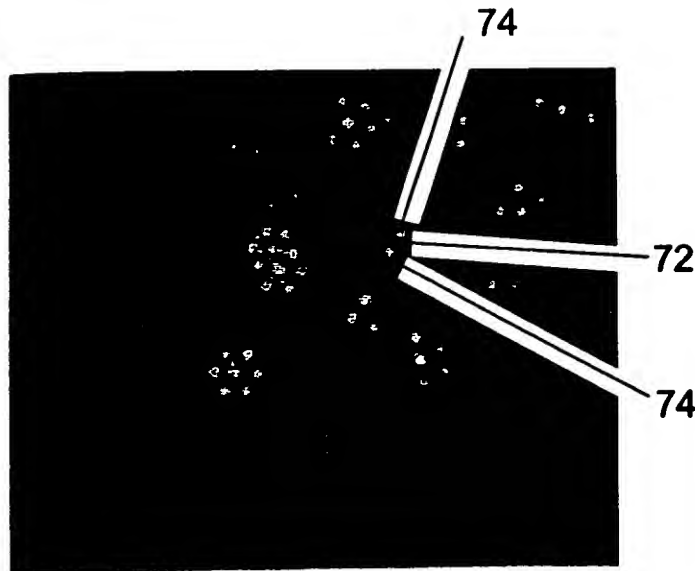
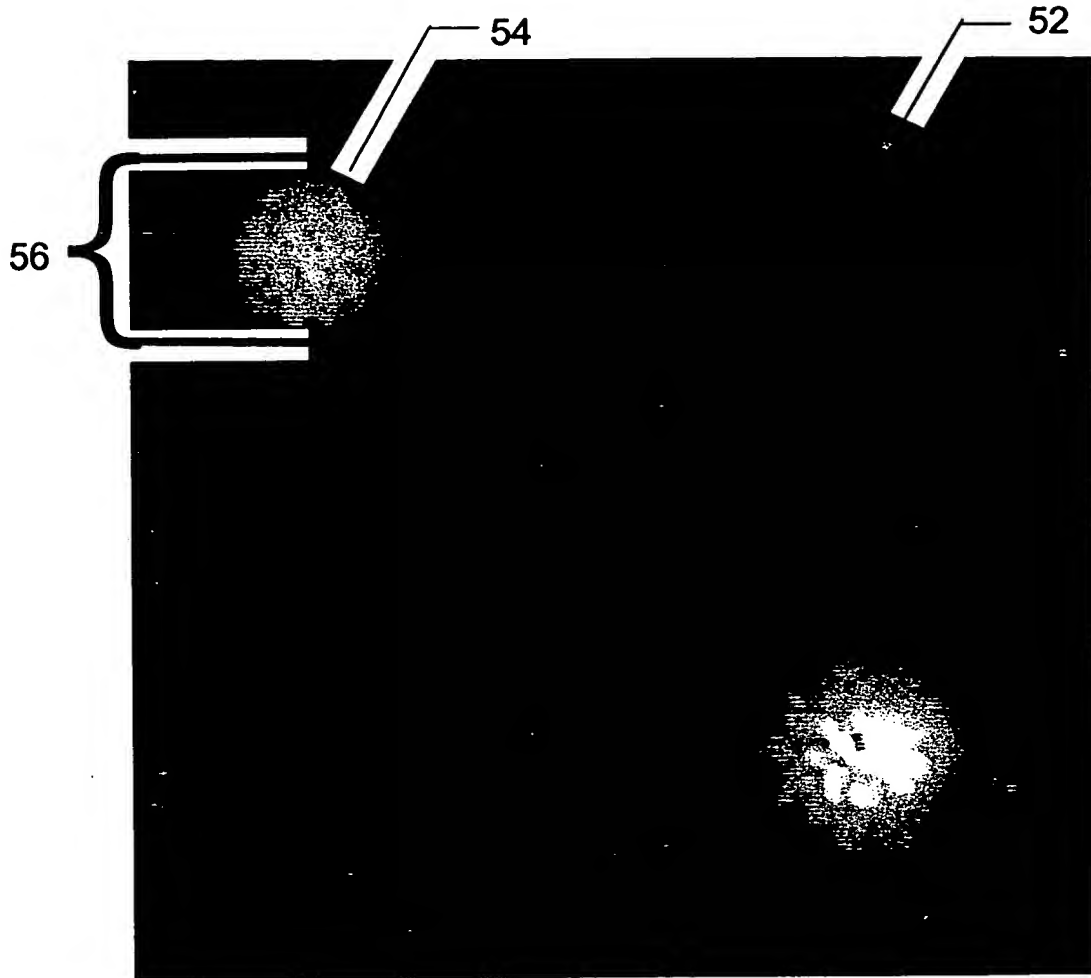


FIG. 7

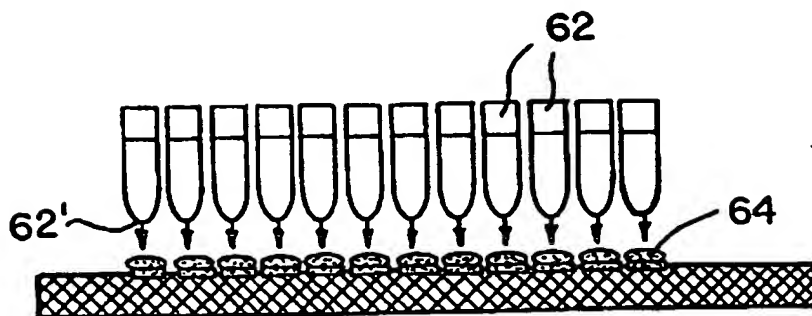
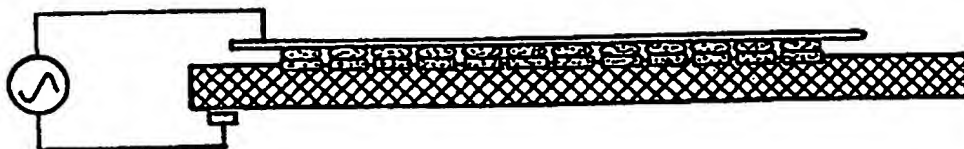
FIG. 6a**FIG. 6b****FIG. 6c**

FIG. 8

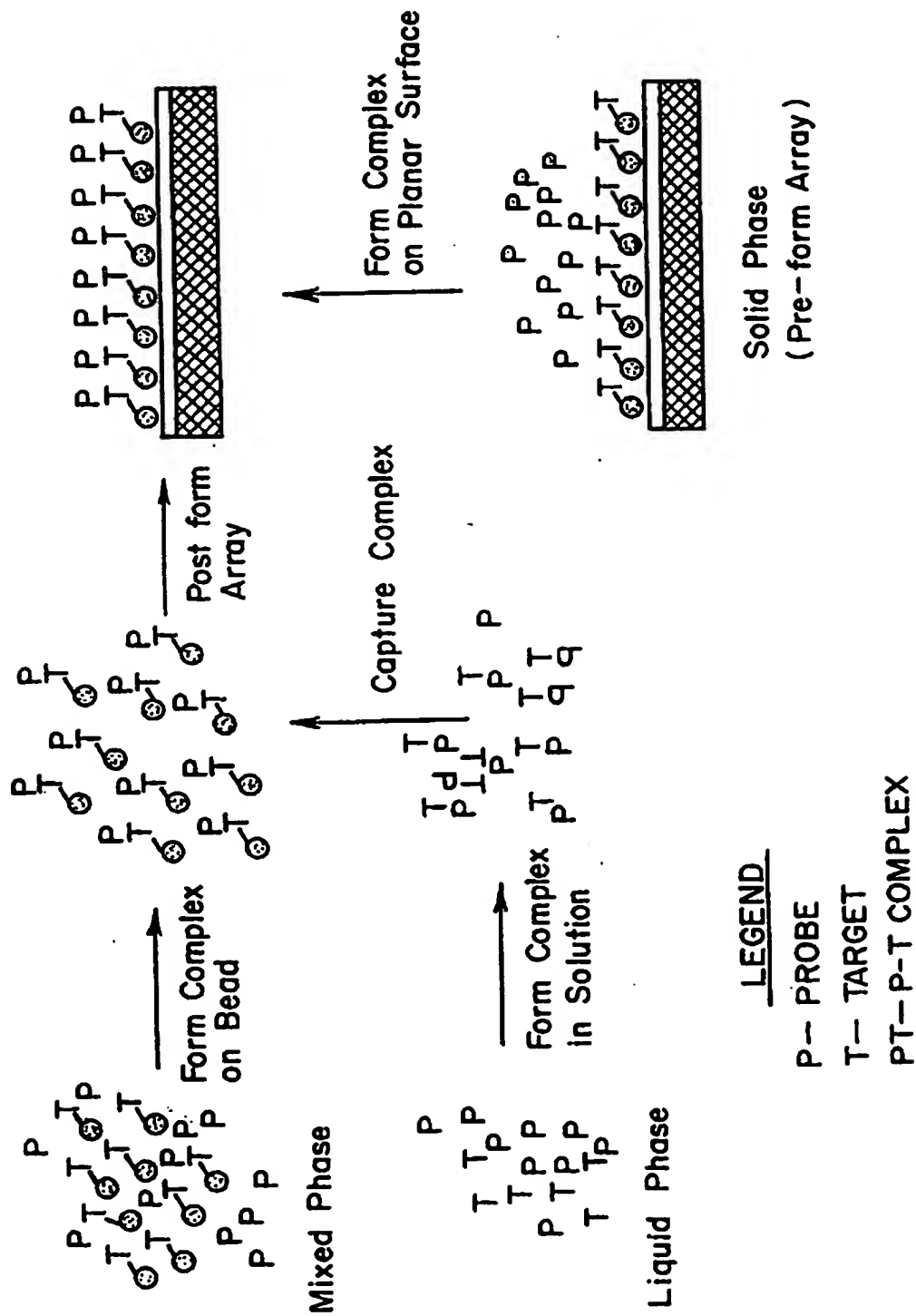


FIG. 9a

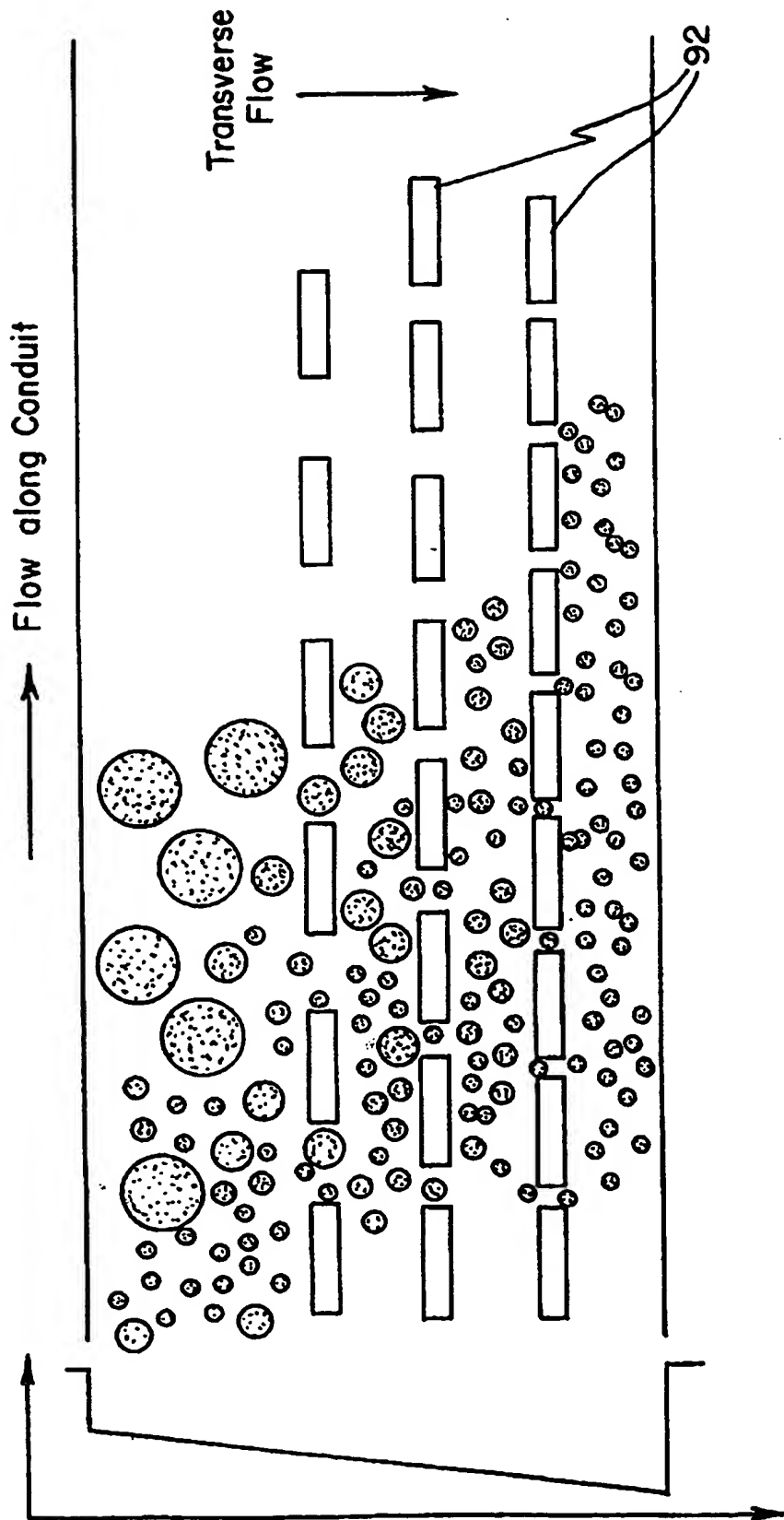


FIG. 9b

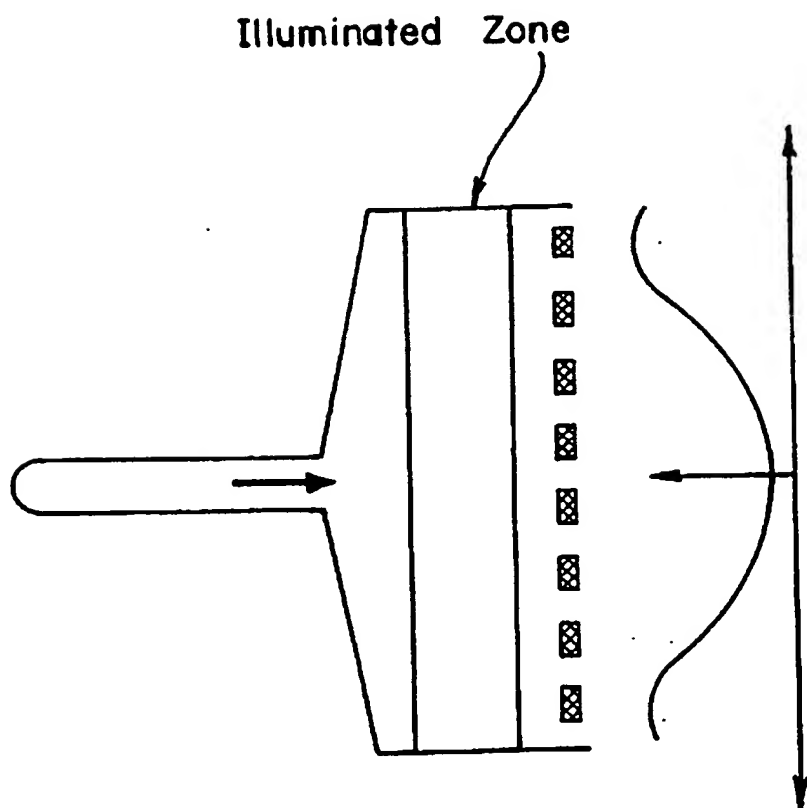


FIG. 9c



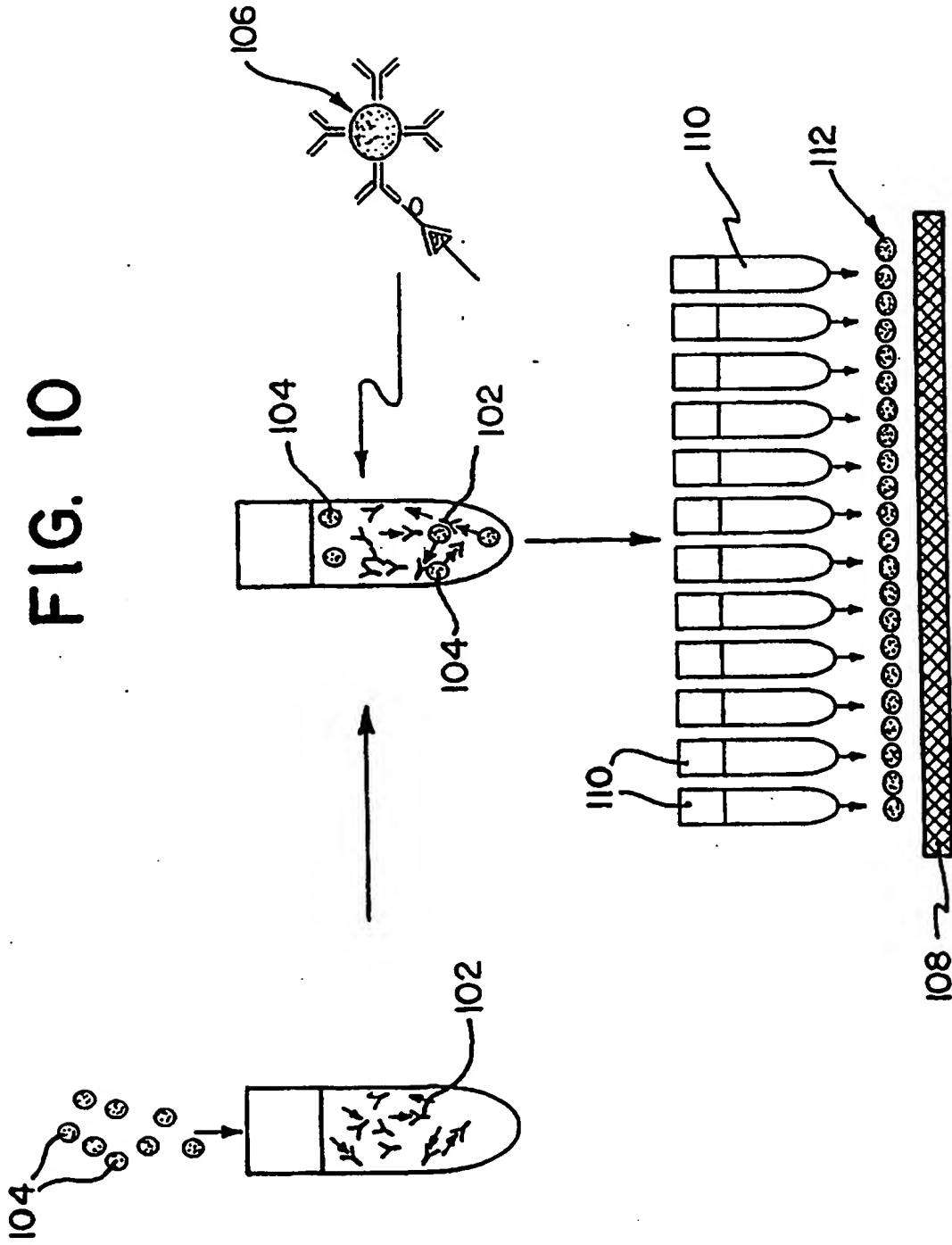


FIG. 11a

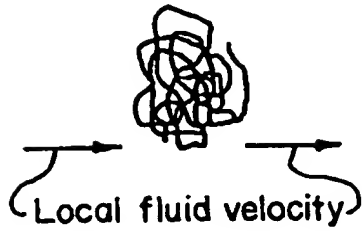


FIG. 11b

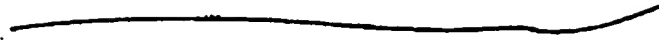


FIG. 11c

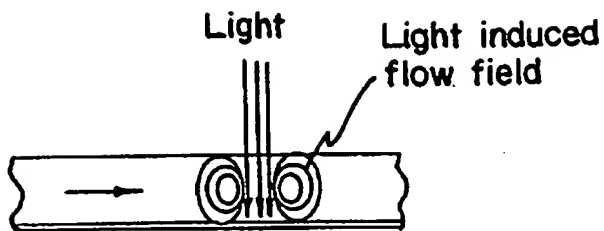


FIG. 11d

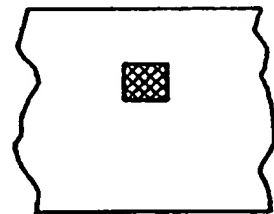
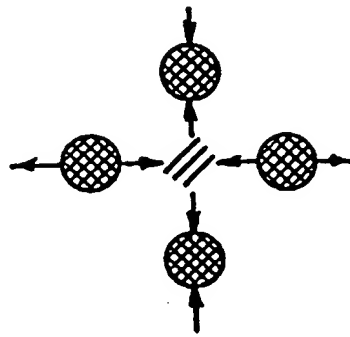
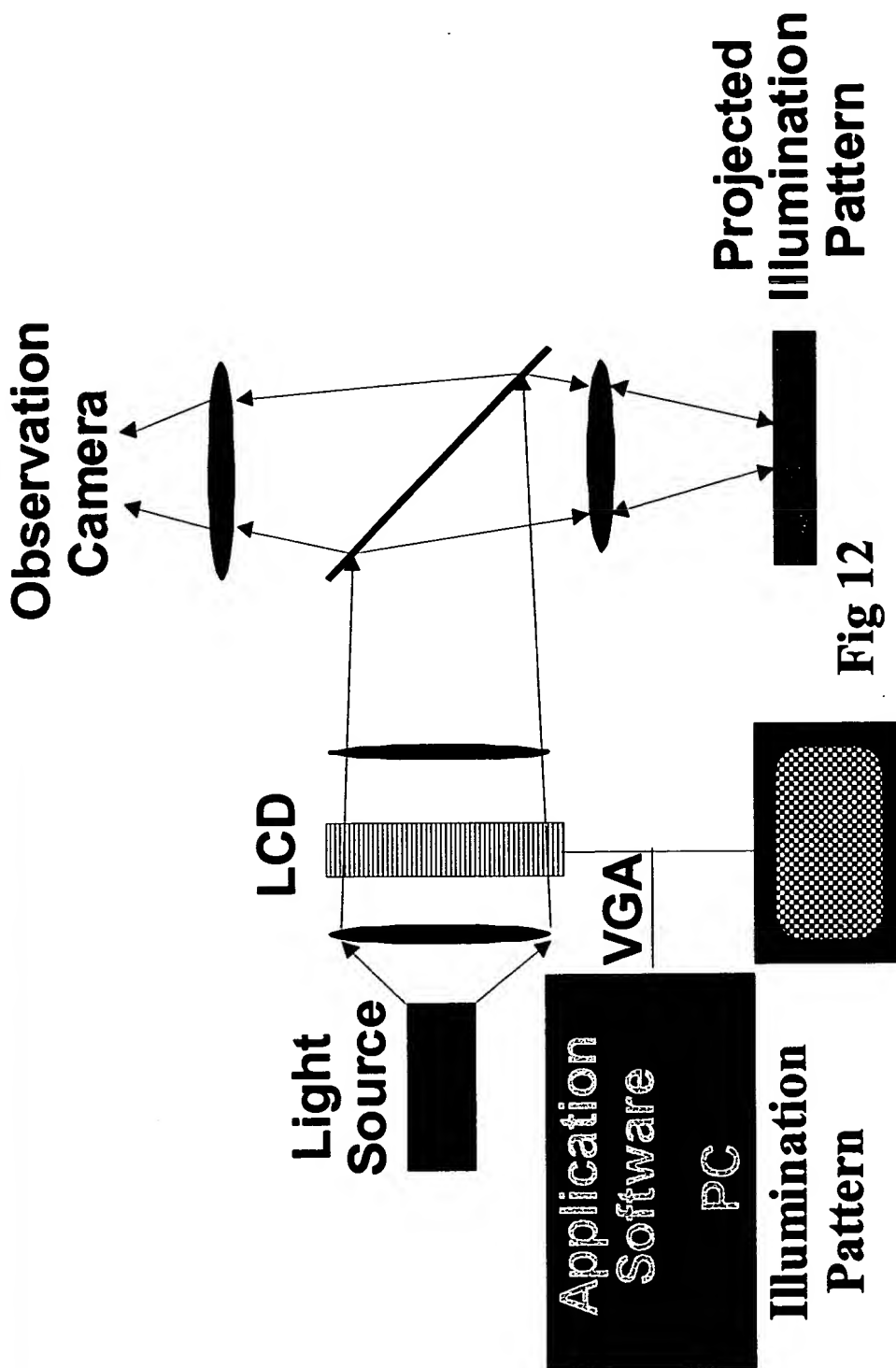


FIG. 11e



ILLUMINATION PATTERN GENERATOR



LCD-PARSE OPTICAL DESIGN

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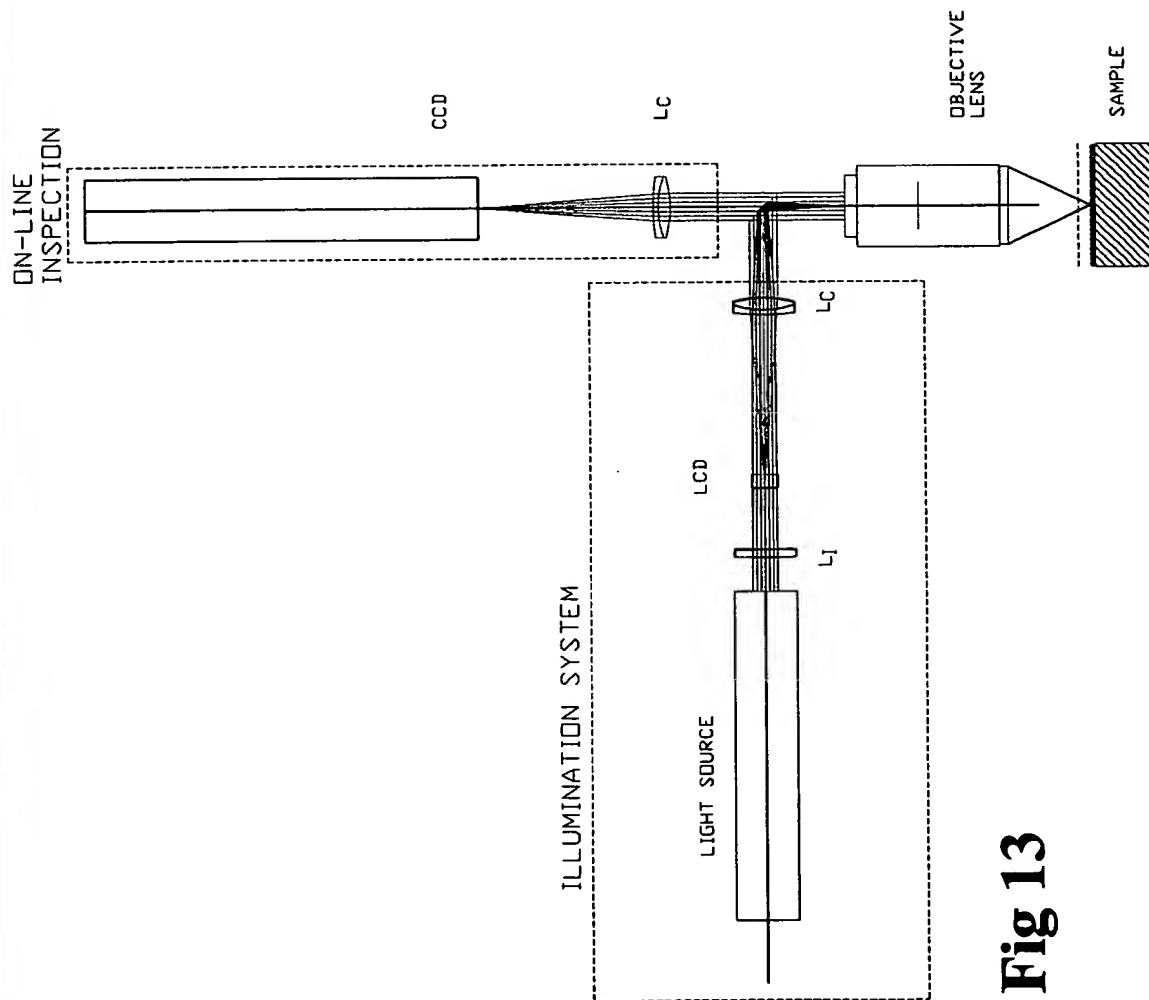


Fig 13

ARRAY SHAPE ADJUSTMENTS

CIRCLE

HORIZONTAL. LINE

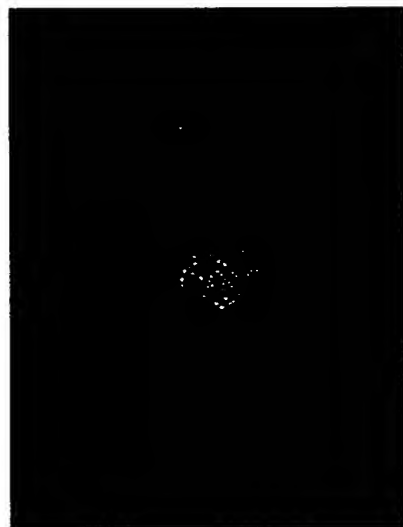


Figure 14a



Figure 14c



Figure 14b

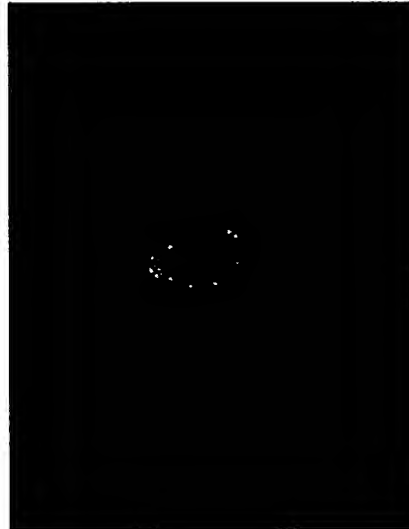


Figure 14d

VERTICAL LINE

SQUARE

COLLECTION AND ARRAY ASSEMBLY

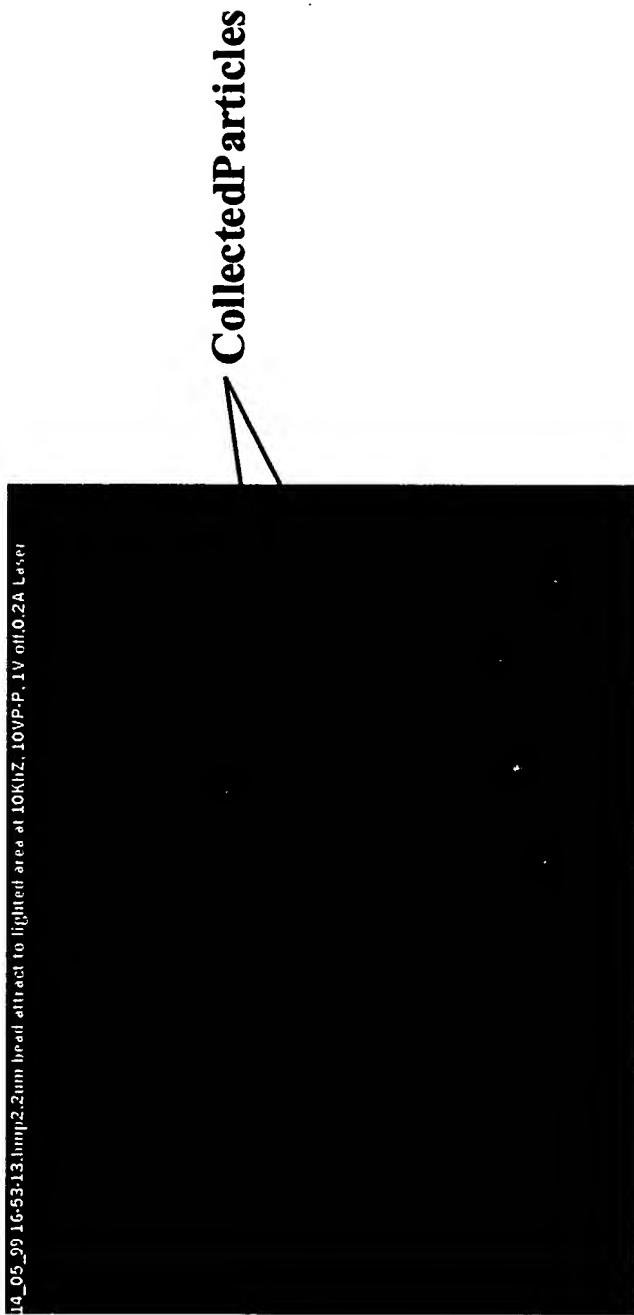


Figure 15a

EXPULSION AND CONFINEMENT

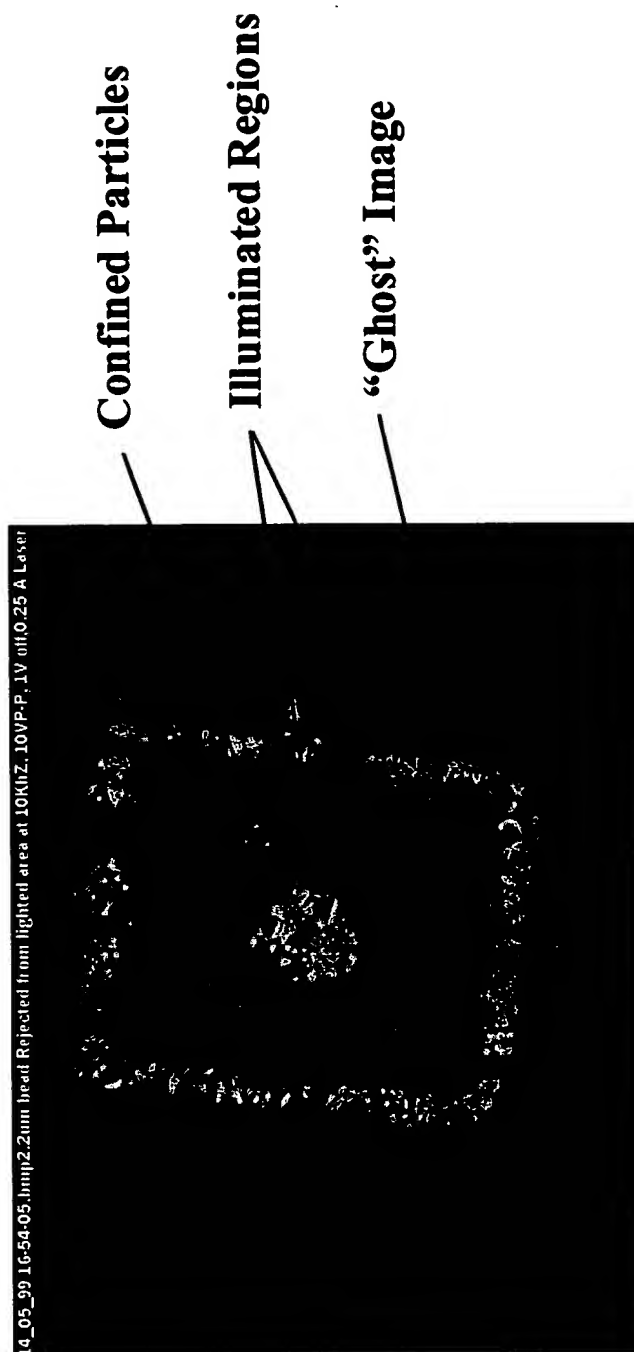


Figure 15b

DRAG AND DROP



Figure 16

Programmable Array Reconfiguration and Segmentation

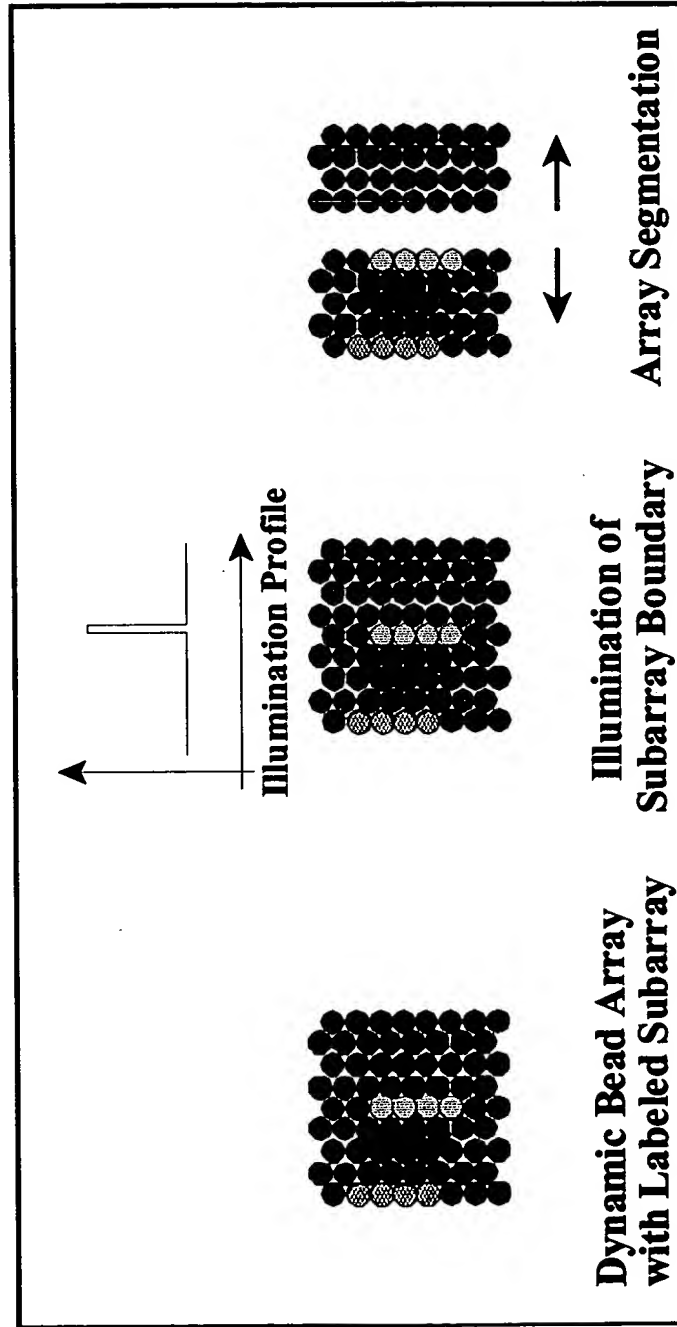


Figure 17

LCD PARSE

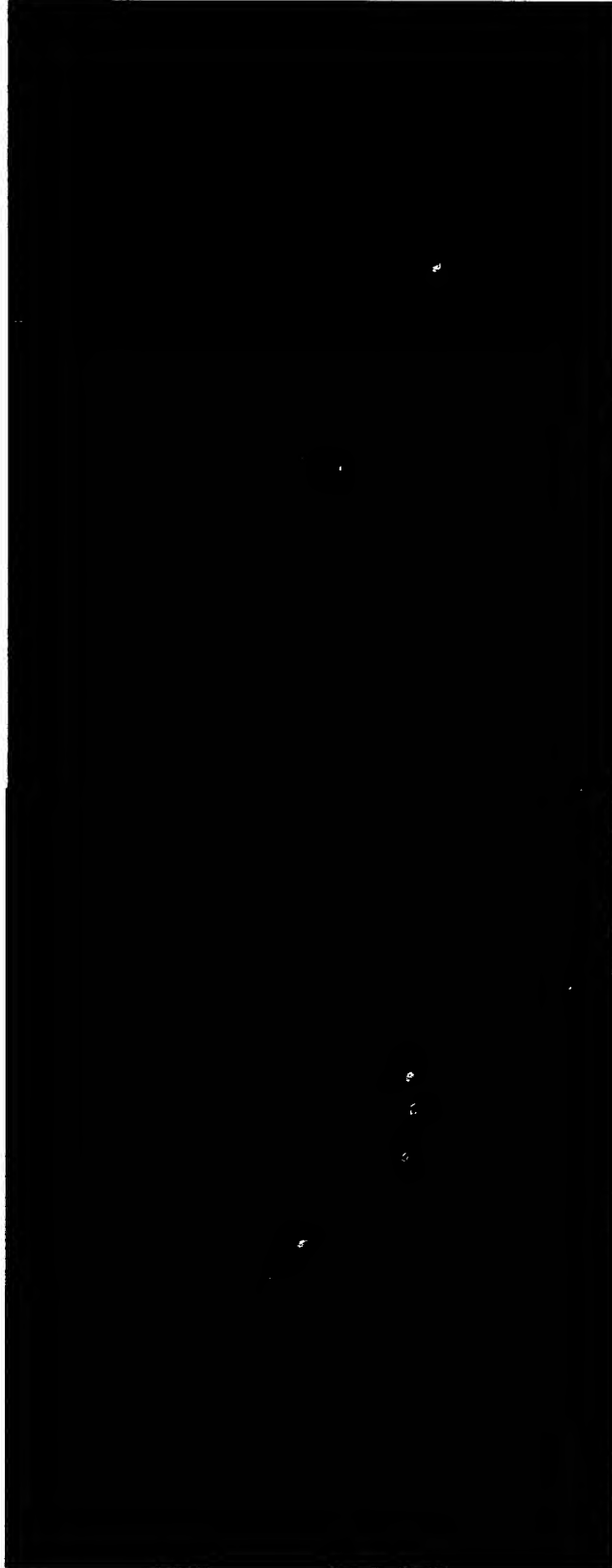


Figure 18a

Figure 18b

LCD PARSE

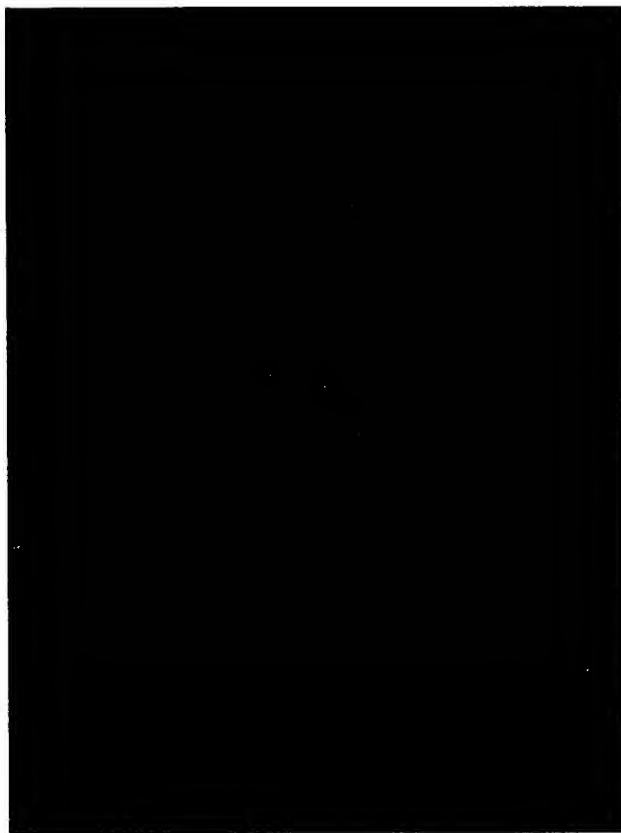
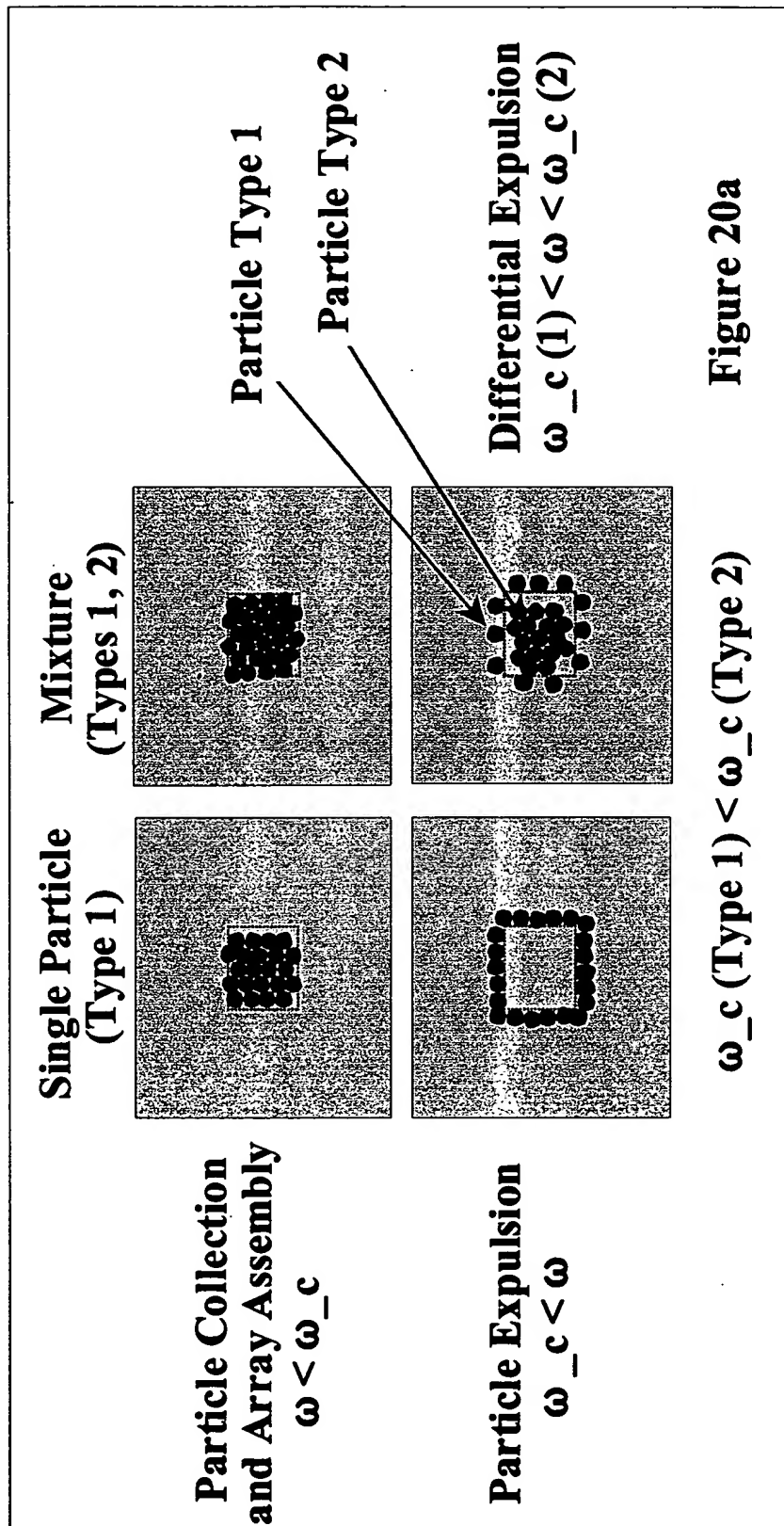


Figure 19

FRACTIONATION

Differential Frequency Dependence of Particle Expulsion
 (NOTE: ω_c denotes a characteristic frequency)



FRACTIONATION

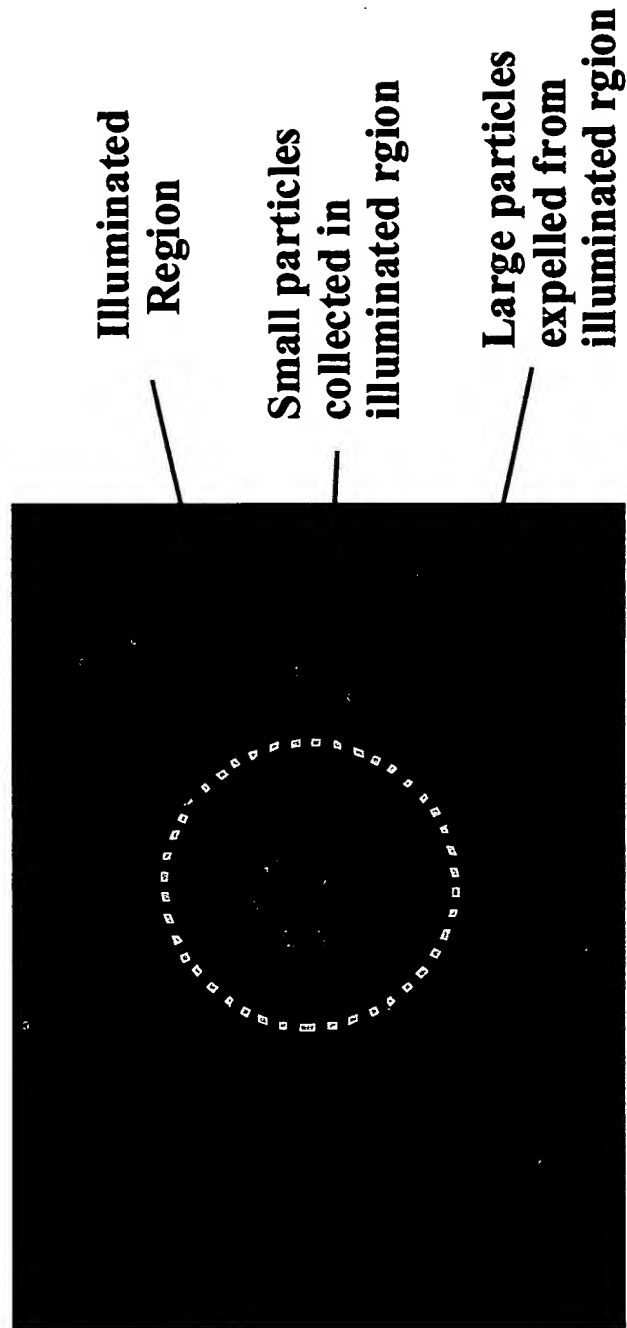


Figure 20b

LCD PARSE

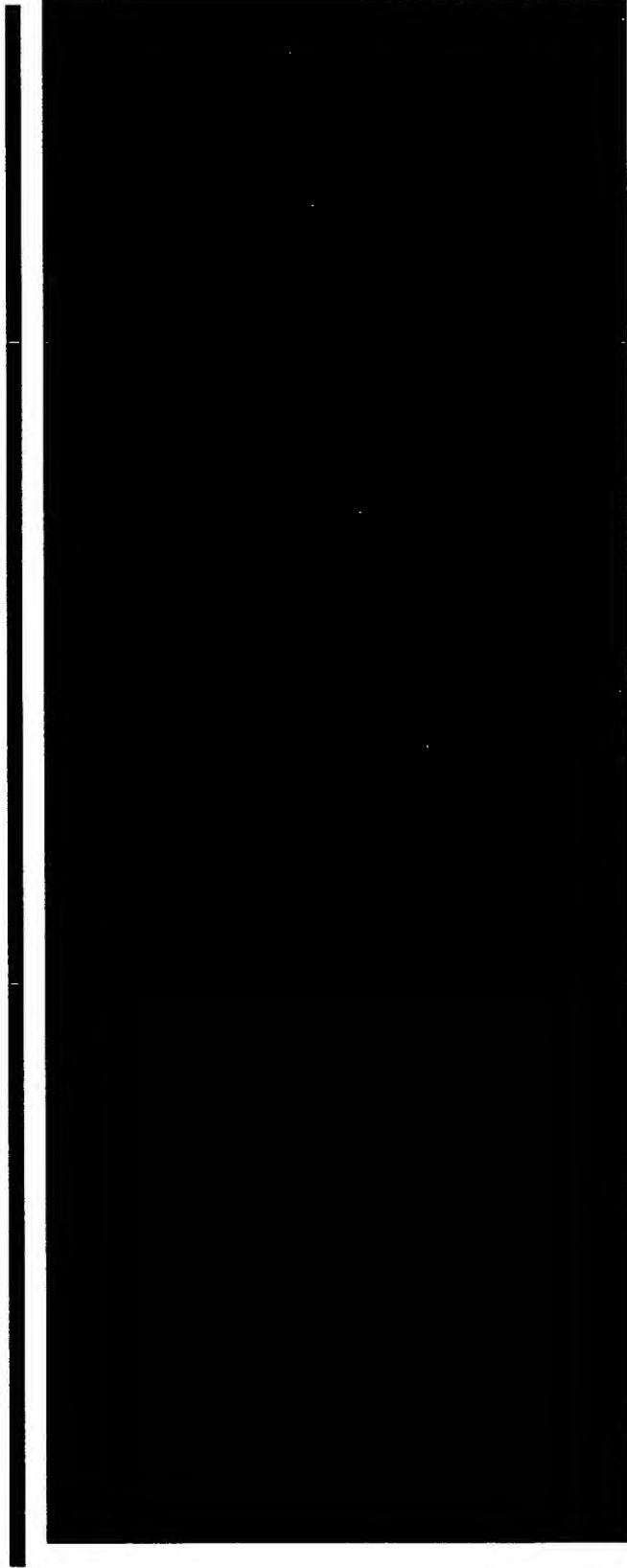


Figure 21a

Figure 21b

Encoding Methodologies

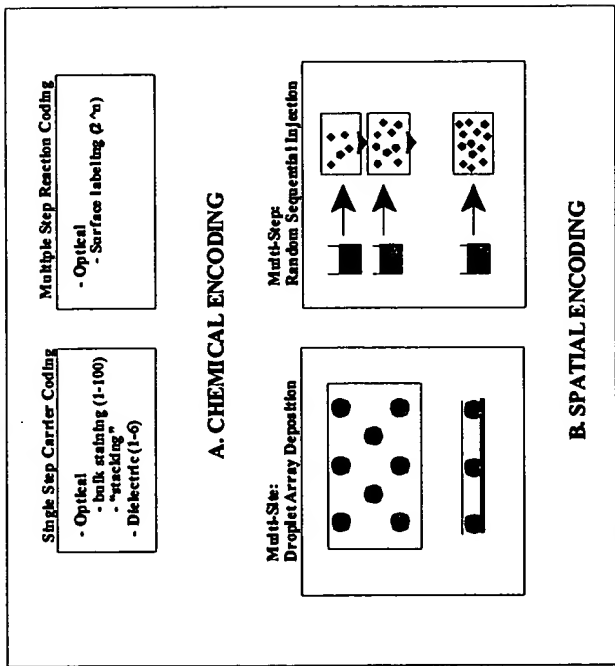


Figure 22a

1 - Pre-Processing

2 - Post-Processing

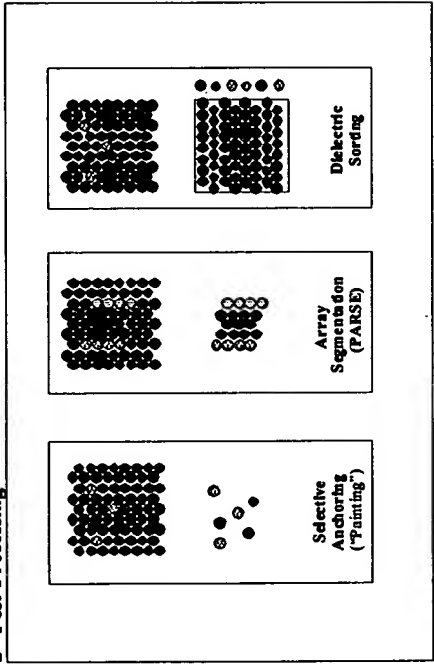


Figure 22b

RANDOM SEQUENTIAL INJECTION

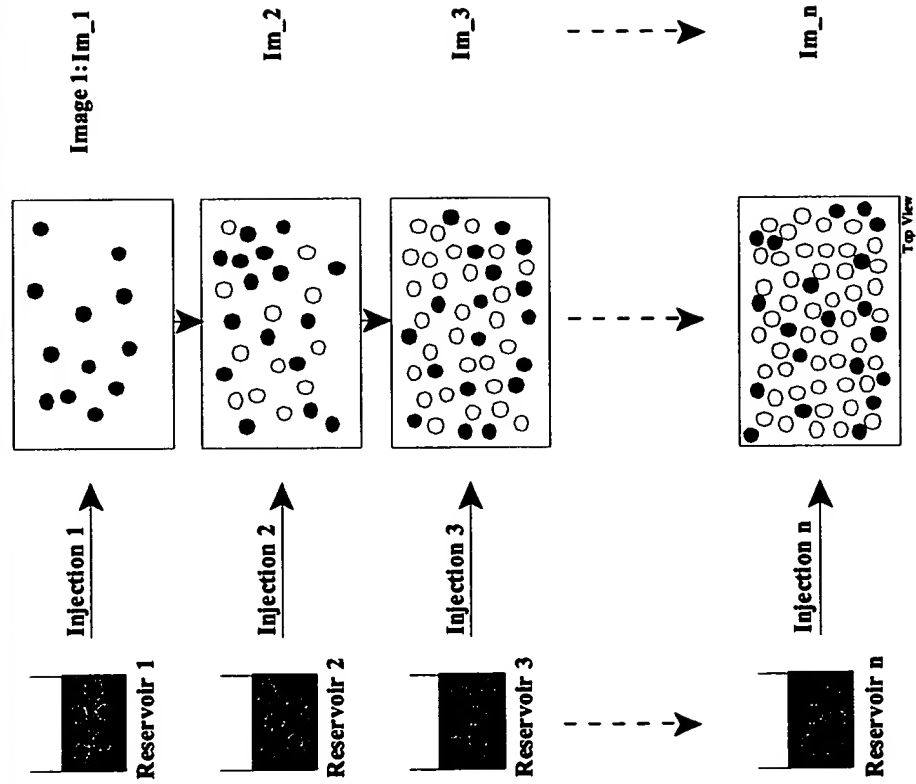


Figure 23

SEQUENTIAL INJECTION & LIGHT-CONTROLLED ARRAY PLACEMENT

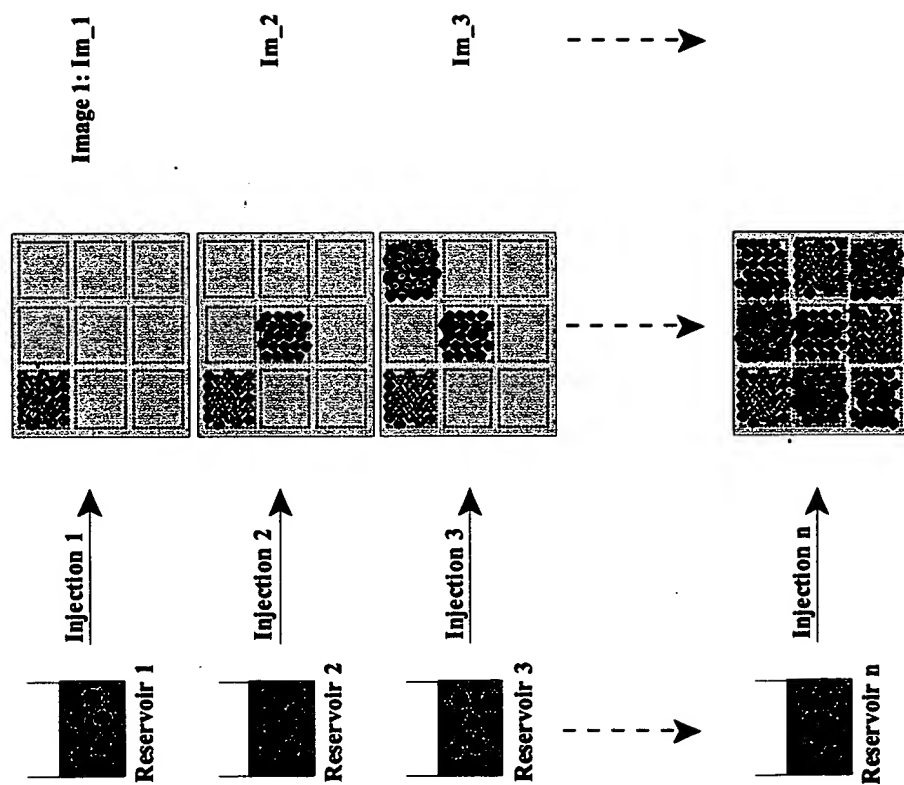


Figure 24

MACRO-TO-MICRO TRANSITION

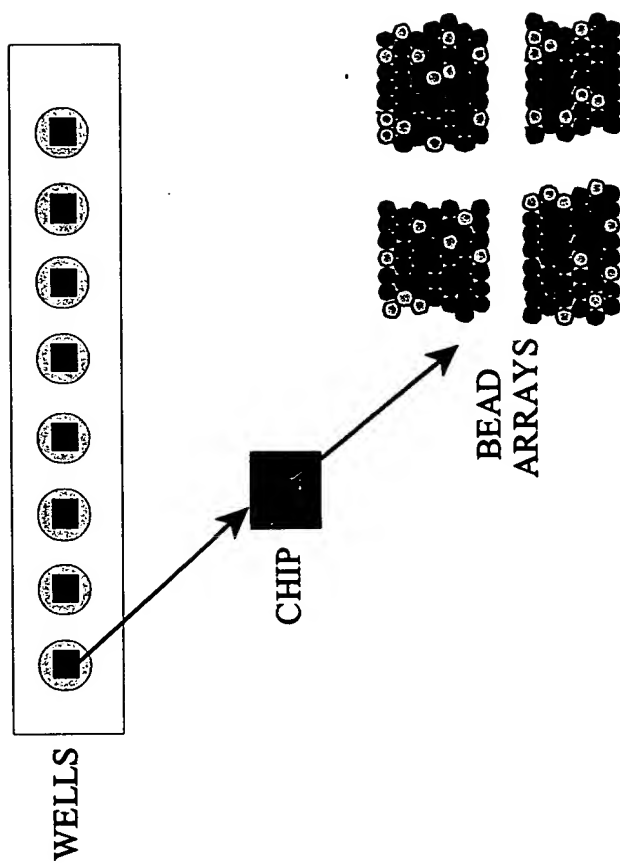


Figure 25a

ARRAY ENCODING

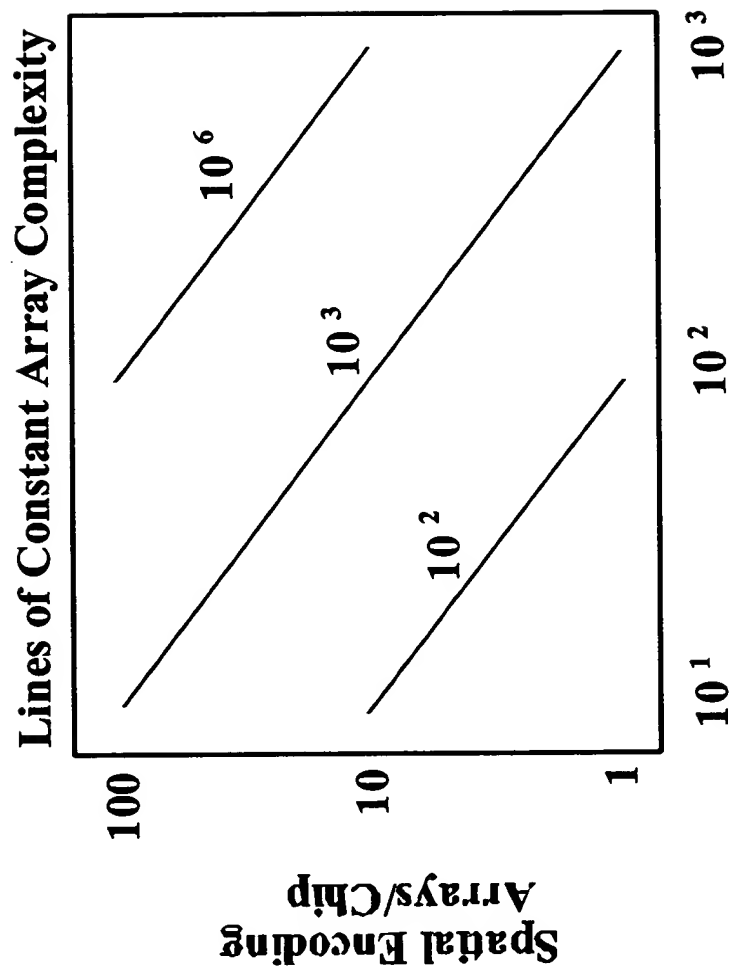


Figure 25b

ARRAY ENCODING

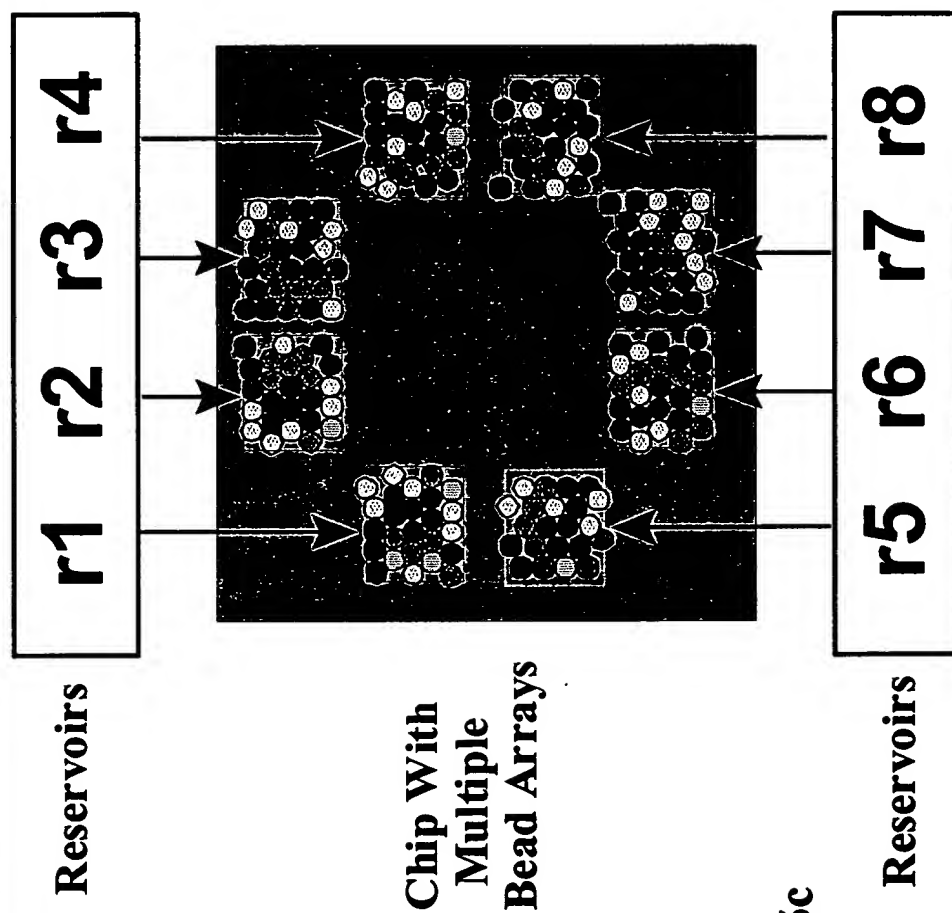


Figure 25c

SEQUENTIAL ASSEMBLY: "BANDING"

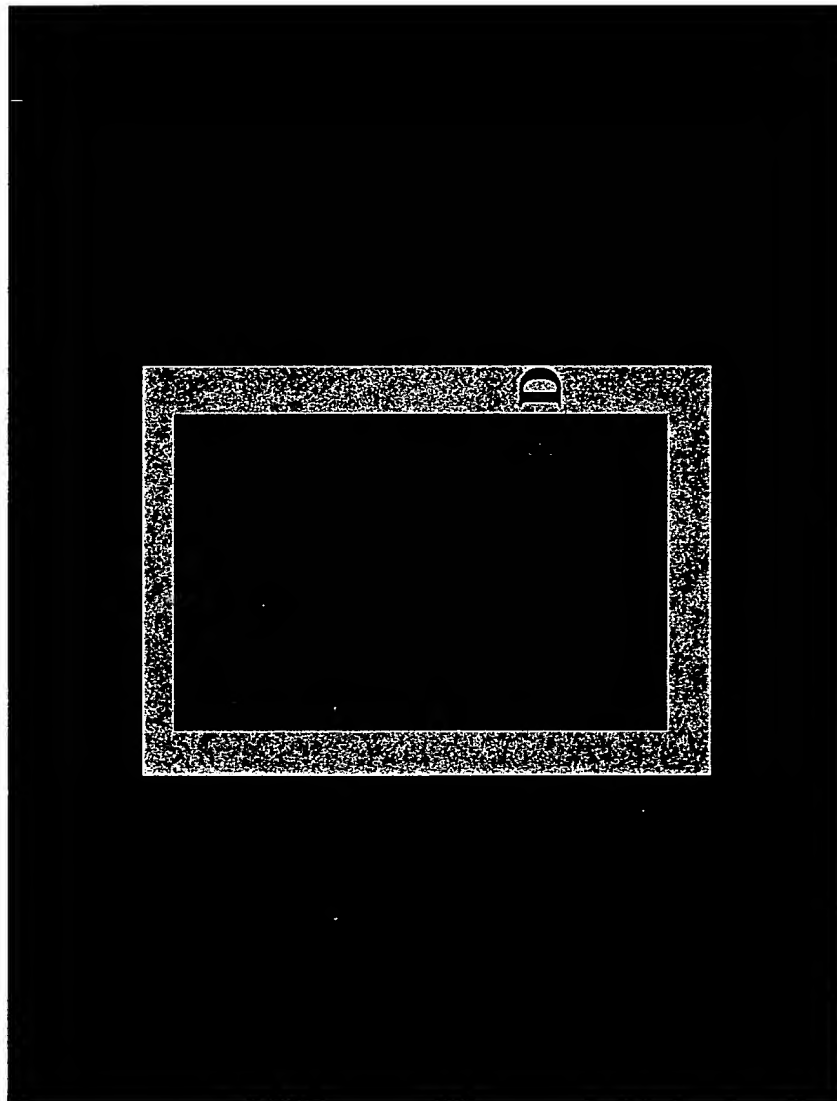
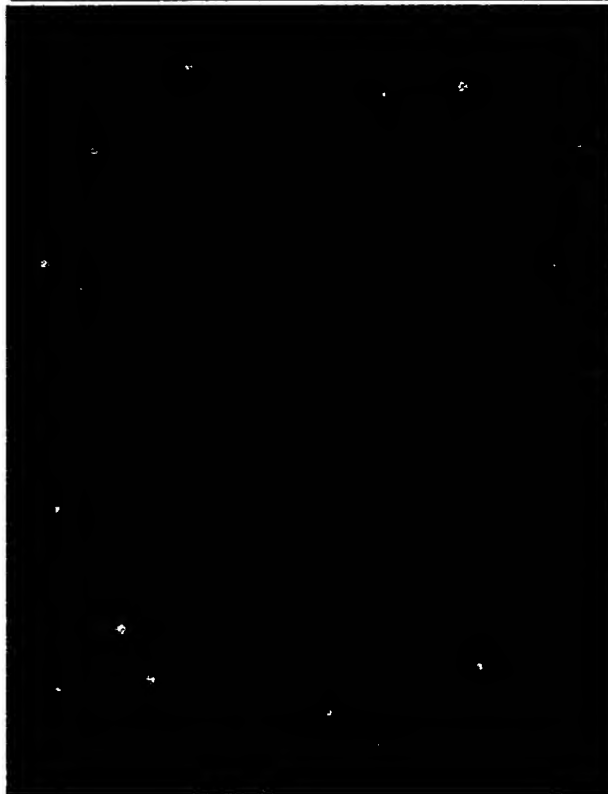


Figure 26a

SEQUENTIAL ASSEMBLY: "BANDING"

Mixture of Two Particle Types

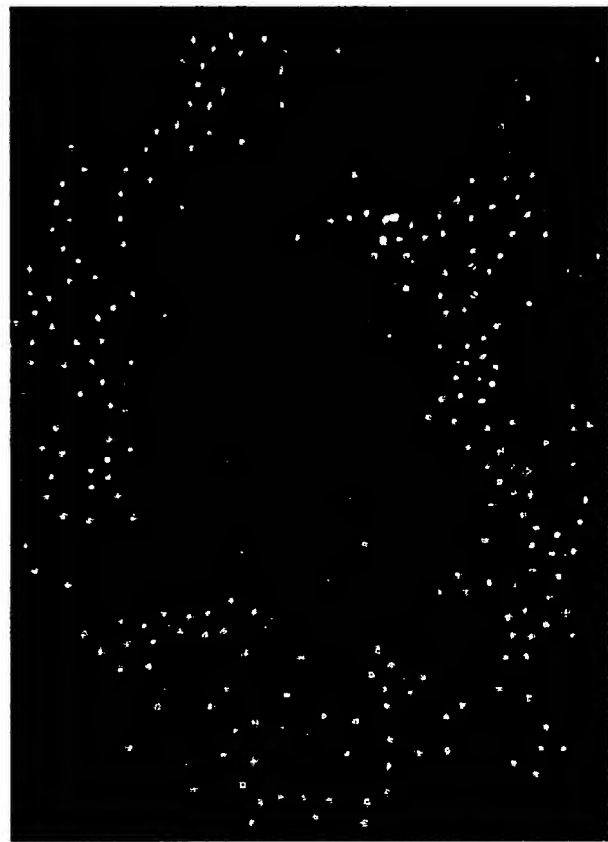
Brightfield Image



2.8 μm

5.5 μm

Darkfield Image



2.8 μm

5.5 μm

Figure 26b

LCD PARSE

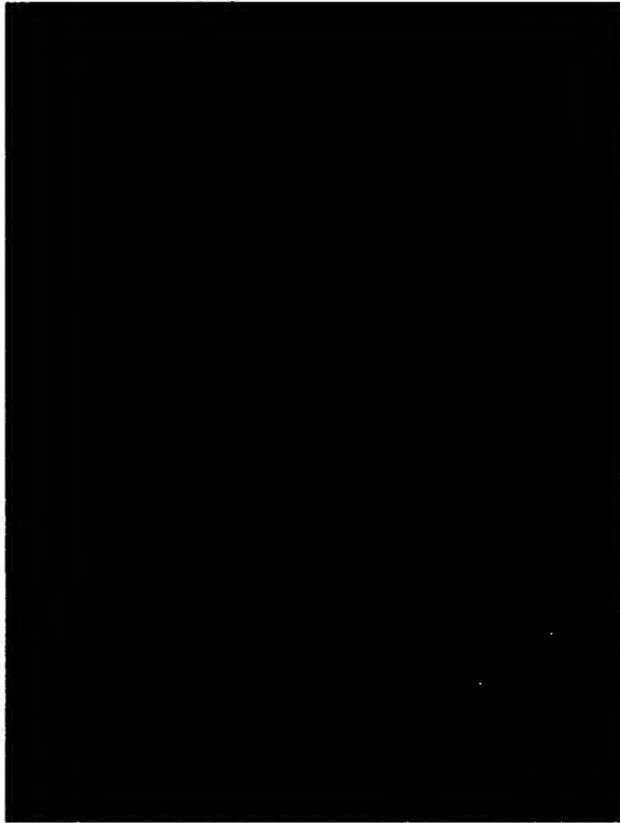


Figure 27

ARRAY OF RANDOM SUBARRAYS

A UNIQUE TWO-DIMENSIONAL BAR CODE

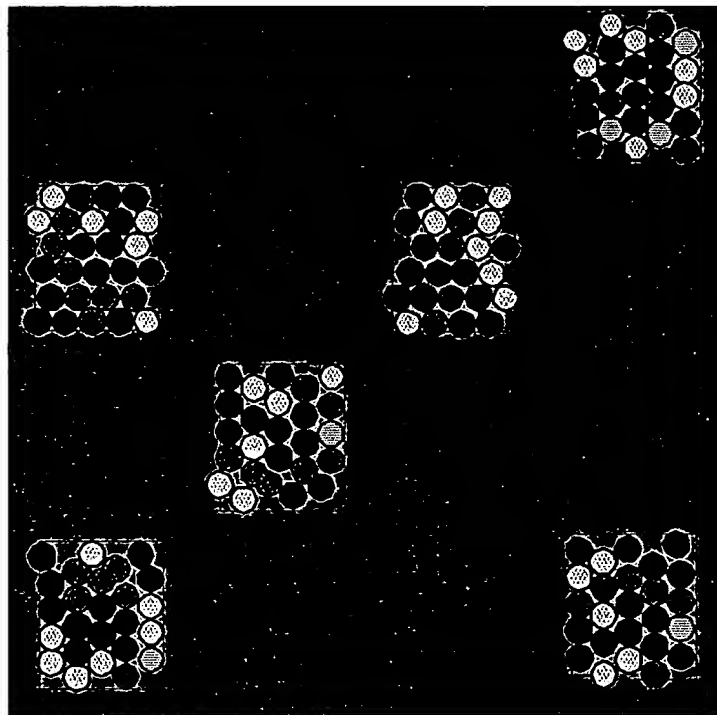


Figure 28

LIGHT-INDUCED FLUID FLOW

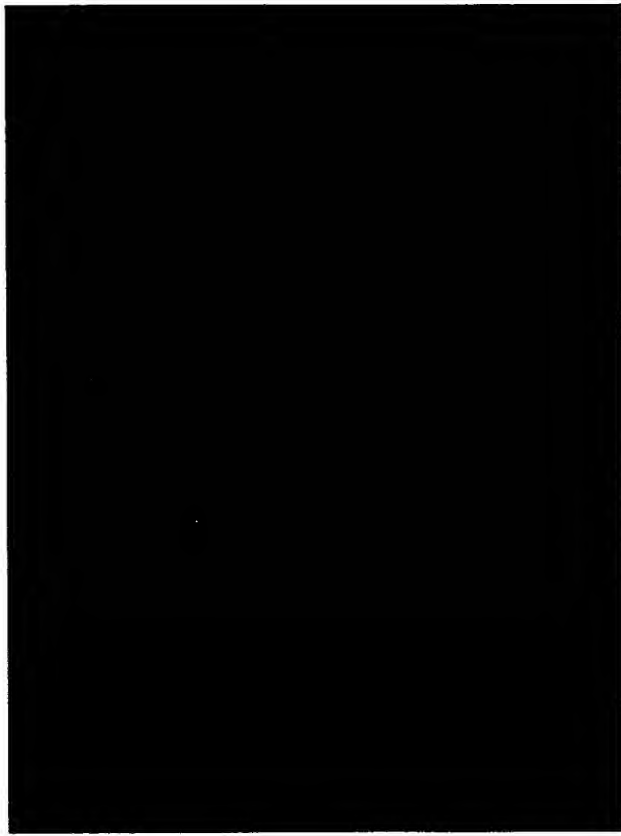


Figure 29